

## **PROPOSED AMENDMENTS TO THE CLAIMS**

This listing of claims will replace all prior versions, and listings, of claims in the application:

### **Listing of Claims:**

1. (Currently Amended) A method in a computing system for preemptive determination of the potential for atypical clinical event occurrence related to the administering of at least one medication to a person having an electronic medical record (EMR), the method comprising the steps of:

receiving a selection of the person from a list of patients displayed at a user interface window, wherein the list of patients is extracted from patient-procedure entries stored in a unified healthcare network, and wherein the patient-procedure entries associate the person with a medical procedure;

utilizing the medical procedure associated with the selected person to interact with one or more pre-built medication-procedure tables;

based on the interaction, accessing a list of possible medications, and dosages thereof, that are to be administered to the person for the medical procedure;

employing a control server to compare the medication list to information in the person's electronic medical record (EMR), wherein the EMR maintains dosage amounts of the medications the person is taking, foods the person is consuming, and allergies to medications the person is ~~know~~known to have;

determining ~~whether~~that at least one match exists between any of the medications included in the list and the EMR information, wherein the match indicates the potential of an atypical clinical event occurring upon the associated

medication being administered to the person; and

~~when a match is determined to exist~~, outputting a response relating to each match, respectively, wherein the response indicates a specific medication involved in the match, a category of the specific medication, a type of match, and a severity of an associated atypical clinical event, and wherein the type of match is comprises at least one of drug-drug, drug-allergy, or drug-food.

2. (Previously Presented) The method of claim 1, wherein the step of accessing a list of possible medications comprises accessing a list of possible medications that may be administered to a specific person scheduled to undergo a specific type of medical procedure, and wherein the step of employing a control server to compare the medication list comprises comparing the medication list to information in the specific person's EMR.

3. (Original) The method of claim 1, wherein accessing a list of possible medications comprises accessing a list of possible medications that may be administered to any person scheduled to undergo a specific type of medical procedure, and further comprising the steps of selecting a person to undergo the medical procedure and receiving at least one of the medications from the list of medications.

4. (Original) The method of claim 1, wherein the atypical clinical event is one selected from the group consisting of a drug-drug interaction, drug-food interaction, a drug-allergy interaction, and a drug-gene interaction.

5. (Original) The method of claim 1, wherein the medical procedure includes any medical procedure requiring the use of anesthesia.

6. (Original) The method of claim 1, wherein the list of possible medications includes medications used in a medical procedure involving anesthesia.

7. (Original) The method of claim 1, wherein the list of possible medications includes medications used in a radiologic medical procedure.

8. (Original) The method of claim 1, wherein the list of possible medications includes medications used in an oncologic medical procedure.

9. (Canceled).

10. (Previously Presented) The method of claim 1, wherein the response includes a listing of the match and the associated atypical clinical event.

11. (Original) The method of claim 10, wherein the list of possible medications includes a dosage amount for each medication in the list, and wherein the response further includes an indication of the predicted severity of the atypical clinical event.

12. (Original) The method of claim 10, further comprising displaying information about at least one medication of the list of possible medications that is involved in the match upon selection of the medication at the response.

13. (Original) The method of claim 1, wherein the list of possible medications is received over a communication network from a remote computing device.

14. (Previously Presented) The method of claim 1, further comprising:  
selecting the person from the list of patients scheduled for a medical procedure; and

accessing the person's EMR prior to comparing the medication list to information in the person's EMR.

15. (Currently Amended) The method of claim 1, wherein the step of determining whether at least one match exists comprises:

querying a data structure containing information selected from one of the groups consisting of drug-drug interactions and drug-food interactions; and

determining ~~whether~~ that at least one match correlates with one of the drug-drug interactions and drug-food interactions.

16. (Previously Presented) The method of claim 1, further comprising retrieving the person's (EMR) prior to comparing the medication list to information in the person's (EMR).

17. (Currently Amended) A method in a computing system for preemptive determination of the potential for atypical clinical event occurrence related to the administering of at least one medication to a person having an electronic medical record, the method comprising the steps of:

accessing medication-procedure tables that maintain specific sets of medications and dosages thereof that are administered for each of a plurality of medical procedures, wherein the medication-procedure tables include a universal set of medications that are particularly dangerous when administered in a variety of medical procedures;

selecting a pre-defined-list of possible-medications from the medication-procedure tables that are to be administered to the person for a medical procedure

scheduled for the person, wherein the medication list includes a specific set of medications and dosages thereof that correspond to the medical procedure and the universal set of medications;

employing a control server to compare the medication list ~~to directly~~ against information in extracted from the person's electronic medical record (EMR);

determining ~~whether that~~ at least one match exists between any of the selected medications included in the medication list and the EMR information, wherein the at least one match indicates the potential of drug-allergy reactions occurring ~~upon when the associated matching medication being is~~ administered to the person;

employing the control server to compare the medication list ~~to against the~~ information in the person's ~~electronic medical record (EMR[[ ]])~~ upon being passed through an a drug-drug association table and a drug-food association table, wherein the drug-drug association table includes information regarding adverse affects caused by medications interacting with each other, and wherein the drug-food association table includes information regarding adverse affects caused by a medication and a food interacting with each other;

determining ~~whether that~~ at least one match exists between any of the selected medications included in the medication list and the EMR information ~~passed through upon employing the drug-drug and the drug-food association tables,~~ wherein the match indicates the potential of drug-drug or ~~food-drug-drug-food~~ reactions occurring upon the associated selected medication being administered to the person; and

~~when a match is determined to exist,~~ outputting a response relating to each match.

18. (Canceled).

19. (Original) The method of claim 17, wherein the medical procedure includes any medical procedure requiring the use of anesthesia.

20. (Original) The method of claim 17, wherein the list of possible medications includes medications used in a medical procedure involving anesthesia.

21. (Previously Presented) The method of claim 17, wherein the information in the person's EMR includes a list selected from one of the groups consisting of medications the person is currently taking or has recently taken, foods the person has consumed, the person's allergies to medications and genetic test information for the person.

22. (Previously Presented) The method of claim 17, wherein the response includes a listing of the match and an associated atypical clinical event, and wherein the atypical clinical event is one selected from the group consisting of a drug-drug interaction, drug-food interaction, drug-allergy interaction and a drug-gene interaction.

23. (Original) The method of claim 22, wherein the list of possible medications includes a dosage amount for each medication in the list, and wherein the response further includes an indication of the predicted severity of the atypical clinical event.

24. (Original) The method of claim 22, further comprising displaying information about at least one medication of the list of possible medications that is involved in the match upon selection of the medication at the response.

25. (Previously Presented) The method of claim 17, further comprising:

selecting the person from a list of person's scheduled for a medical procedure; and

accessing the person's EMR prior to comparing the medication list to information in the person's EMR.

26. (Currently Amended) The method of claim 17, wherein the step of determining whether at least one match exists comprises:

querying the associated table containing information selected from one of the groups consisting of drug-drug interactions and drug-food interactions; and

determining ~~whether~~ that at least one match correlates with one of the drug-drug interactions and drug-food interactions.

27. (Previously Presented) The method of claim 17, further comprising retrieving a specific person's EMR prior to comparing the medication list to information in the person's EMR.

28. (Previously Presented) The method of claim 17, further comprising modifying the medication list by adding or deleting medications from the list prior to comparing the medication list to information in the person's EMR.

29. (Currently Amended) A method in a computing system for preemptive determination of the potential for atypical clinical event occurrence related to the administering of at least one medication to a person having an electronic medical record, the method comprising the steps of:

accessing medication-procedure tables that maintain specific sets of medications and dosages thereof that are administered for each of a plurality of medical procedures;

selecting a pre-defined-list of possible-medications from the medication-procedure tables that are to be administered to the person for a medical procedure scheduled for the person, wherein the medication list includes a specific set of medications and dosages thereof that correspond to the medical procedure;

employing a control server to compare the medication list to directly against information in-extracted from the person's electronic medical record (EMR), wherein the extracted information includes a weight and an age of the person;

determining whether-that at least one match exists between any of the selected medications included in the medication list and the EMR information, wherein the match indicates the potential of drug-allergy reactions occurring upon the associated-selected medication being administered to the person;

employing the control server to compare the medication list to the information in the person's electronic medical record (EMR) upon being passed through an association table, wherein the association table includes information regarding adverse affects caused by medications interacting with each other and caused by a medication and a food interacting with each other;

determining whether at least one match exists between any of the medications included in the list and the EMR information passed through the association table, wherein the match indicates the potential of drug-drug or food-



~~drug reactions occurring upon the associated medication being administered to the person; and~~

~~when a match is determined to exist, generating an alert box for each match, wherein the alert box includes an indication of the selected medication from the medication list that is involved in the match and a predicted severity of adverse affects that result from administering the matching selected medication, wherein the predicted severity is based on the dosage of the selected matching medication, and the age and the weight of the person receiving the medical procedure; and~~

~~outputting a response relating to each match to a window on a display device, wherein the response includes presenting the alert box for each match within the window, and wherein the predicted severity for each match is presented as a graphical symbol that represents at least one of mild severity, moderate severity, or severe severity.~~

30. (Original) The method of claim 29, wherein the at least one medication is to be administered to the person prior to or during a medical procedure, and wherein the medication list includes a universal set of medications that may be administered regardless of the type of medical procedure.

31. (Previously Presented) The method of claim 29, further comprising, based on the determinations, selecting an atypical clinical event from the group consisting of a drug-drug interaction, drug-food interaction, a drug-allergy interaction, and a drug-gene interaction.

32. (Original) The method of claim 29, wherein the at least one medication is to be administered to the person prior to or during a medical procedure, and wherein the medical procedure includes any medical procedure requiring the use of anesthesia.

33. (Previously Presented) The method of claim 29, wherein the information in the person's EMR includes a list selected from one of the groups consisting of medications the person is currently taking or has recently taken, foods the person has consumed, the person's allergies to medications and genetic test information for the person.

34. (Previously Presented) The method of claim 31, wherein the response includes a listing of the match and the associated atypical clinical event.

35. (Currently Amended) A computing system for preemptively determining the potential for atypical clinical event occurrence related to the administering of a medication to a person having an electronic medical record (EMR), the computer system comprising a processing device coupled to a computer storage medium, the computer storage medium having stored thereon a plurality of program components executable by the processing device, the program components comprising:

a receiving component that performs the following processes:~~receives a list of possible medications that are administered for a medical procedure~~

(a) accessing medication-procedure tables that maintain specific sets of medications and dosages thereof that are administered for each of a plurality of medical procedures, wherein the medication-procedure tables include a universal set of medications that are particularly dangerous when administered in a variety of medical procedures; and

(b) selecting a list of medications from the medication-procedure tables that are to be administered to the person for a medical procedure scheduled for the person, wherein the medication list includes a specific set of medications and dosages thereof that correspond to the medical procedure and the universal set of medications;

a comparing component for comparing the medication list ~~to~~ directly against information in ~~extracted from~~ the person's electronic medical record (EMR);

a determining component that determines ~~whether that~~ a match exists between any of the selected medications included in the medication list and the EMR information, wherein the at least one match indicates the potential of drug-allergy reactions occurring ~~upon when the associated matching medication being~~ is administered to the person;

the comparing component further configured to compare the medication list ~~to~~ against the information in the person's ~~electronic medical record (EMR[[]])~~ upon being passed through an a drug-drug association table and a drug-food association table, wherein the drug-drug association table includes information regarding adverse affects caused by medications interacting with each other, and wherein the drug-food association table includes information regarding adverse affects caused by a medication and a food interacting with each other;

the determining component being further configured to determine ~~whether that~~ at least one match exists between any of the selected medications included in the medication list and the EMR information ~~passed through upon employing the drug-drug and the drug-food association tables,~~ wherein the match indicates the

potential of drug-drug or ~~food-drug~~ drug-food reactions occurring upon the ~~associated~~ selected medication being administered to the person; and

an outputting component that outputs a response relating to each match.

36. (Original) The system of claim 35, wherein the receiving component receives a list of possible medications that may be administered to a specific person scheduled to undergo a specific type of medical procedure, and wherein the comparing component compares the medication list to information in the specific medical record.

37. (Original) The system of claim 35, wherein the receiving component receives a list of possible medications that may be administered to any person scheduled to undergo a specific type of medical procedure, and further comprising a selecting component for selecting a person to undergo the medical procedure and receive at least one of the medications from the list of medications.

38. (Previously Presented) The computing system of claim 35, wherein determining component is further configured to select an atypical clinical event from the group consisting of a drug-drug interaction, drug-food interaction, drug-allergy interaction and a drug-gene interaction.

39. (Original) The computing system of claim 35, wherein the list of possible medications received includes medications used in a medical procedure involving anesthesia.

40. (Original) The computing system of claim 35, wherein the list of possible medications received includes medications used in a radiologic medical procedure.

41. (Currently Amended) The computing system of claim 35, wherein the list of possible medications received includes medications used in ~~a oncologic~~ an oncologic medical procedure.

42. (Previously Presented) The computing system of claim 35, further comprising a retrieving component that retrieves a specific person's EMR from a unified healthcare system, and wherein information in the EMR includes a list selected from one of the groups consisting of medications the person is currently taking or has recently taken, foods the person has consumed the person's allergies to medications and genetic test information for the person.

43. (Previously Presented) The computing system of claim 38, wherein the outputting component includes a display component that displays the outputted response as a listing of at least one of the matches and the associated atypical clinical event.

44. (Previously Presented) The computing system of claim 43, wherein the list of possible medications received includes a dosage amount for each medication in the list, and wherein the outputted response further includes an indication of the predicted severity of the atypical clinical event.

45. (Original) The computing system of. claim 44, further comprising a selecting component for selecting a medication of the list of possible medications that is involved in the match, and wherein the display component displays information about the selected medication.

46. (Original) The computing system of claim 35, wherein the receiving component receives the list of possible medications to be administered over a communication network from a remote computing device.

47. (Canceled).

48. (Currently Amended) A computing system for preemptively determining the potential for atypical clinical event occurrence related to the administering of a medication to a person having an electronic medical record (EMR), the computer system comprising a processing device coupled to a computer storage medium, the computer storage medium having stored thereon a plurality of program components executable by the processing device, the program components comprising:

an accessing component that accesses medication-procedure tables that maintain specific sets of medications and dosages thereof that are administered for each of a plurality of medical procedures, and that selects a pre-defined-list of possible-medications from the medication-procedure tables that are to be administered to the person for a medical procedure scheduled for the person, wherein the medication list includes a specific set of medications and dosages thereof that correspond to the medical procedure;

a comparing component for comparing the medication list ~~to~~ directly against information in-extracted from the person's electronic medical record (EMR), wherein the extracted information includes a weight and an age of the person;

a determining component that determines ~~whether-that~~ a match exists between any of the selected medications included in the medication list and the

EMR information, wherein the match indicates the potential of drug-allergy reactions occurring upon the ~~associated~~selected medication being administered to the person;

~~the comparing component further configured to compare the medication list to the information in the person's electronic medical record (EMR) upon being passed through an association table, wherein the association table includes information regarding adverse affects caused by medications interacting with each other and caused by a medication and a food interacting with each other;~~

~~the determining component being further configured to determine whether that at least one match exists between any of the medications included in the list and the EMR information passed through the association table, wherein the match indicates the potential of drug-drug or food-drug reactions occurring upon the associated medication being administered to the person; and~~

an outputting component that performs the operations comprising:

(a) generating an alert box for each match, wherein the alert box includes an indication of the selected medication from the medication list that is involved in the match and a predicted severity of adverse affects that result from administering the matching selected medication, wherein the predicted severity is based on the dosage of the selected matching medication, and the age and the weight of the person receiving the medical procedure; and

(b) outputting a response relating to each match to a window on a display device, wherein the response includes presenting the alert box for each match within the window, and wherein the predicted severity for

each match is presented as a graphical symbol that represents at least one of mild severity, moderate severity, or severe severity.

49. (Previously Presented) The computing system of claim 48, wherein the determining component is further configured to select an atypical clinical event from the group consisting of a drug-drug interaction, drug-food interaction, drug-allergy interaction and a drug-gene interaction.

50. (Original) The computing system of claim 48, wherein the list of possible medications received includes medications used in a medical procedure involving anesthesia.

51. (Previously Presented) The computing system of claim 48, further comprising a retrieving component that retrieves a specific person's EMR from a unified healthcare system, and wherein information in the EMR includes a list selected from one of the groups consisting of medications the person is currently taking or has recently taken, foods the person has consumed the person's allergies to medications and genetic test information for the person.

52. (Previously Presented) The computing system of claim 49, wherein the outputting component includes a display component that displays the outputted response as a listing of at least one of the matches and the associated atypical clinical event.

53. (Original) The computing system of claim 52, wherein the list of possible medications received includes a dosage amount for each medication in the list, and wherein the outputted response further includes an indication of the predicted severity of the atypical clinical event.



54. (Original) The computing system of claim 52, further comprising a selecting component for selecting a medication of the list of possible medications that is involved in the match, and wherein the display component displays information about the selected medication.

55. (Original) The computing system of claim 48, wherein the receiving component receives the list of possible medications to be administered over a communication network from a remote computing device.

56. (Canceled).

57. (Currently Amended) Computer storage media containing computer-executable instructions that, when executed, perform a method for controlling a computing system for preemptive determination of the potential for atypical clinical event occurrence related to the administering of at least one medication to a person having an electronic medical record (EMR), the method comprising the steps of:

accessing medication-procedure tables that maintain specific sets of medications and dosages thereof that are administered for each of a plurality of medical procedures, wherein the medication-procedure tables include a universal set of medications that are particularly dangerous when administered in a variety of medical procedures;

selecting a receiving a list of possible medications from the medication-procedure tables that are to be administered to the person for a medical procedure scheduled for the person, wherein the medication list includes a specific set of medications and dosages thereof that correspond to the medical procedure and the

universal set of medications;

comparing the medication list ~~to~~ directly against information ~~in~~ extracted  
from the person's electronic medical record (EMR);

determining ~~whether~~ that at least one match exists between any of the  
selected medications included in the medication list and the EMR information,  
wherein the at least one match indicates the potential of drug-allergy reactions  
occurring ~~upon~~ when the ~~associated~~ matching medication ~~being~~ is administered to  
the person;

comparing the medication list ~~to~~ against the information in the person's  
~~electronic medical record (EMR[[]])~~ upon being passed through an a drug-drug  
association table and a drug-food association table, wherein the drug-drug  
association table includes information regarding adverse affects caused by  
medications interacting with each other, and wherein the drug-food association  
table includes information regarding adverse affects caused by a medication and a  
food interacting with each other;

determining ~~whether~~ that at least one match exists between any of the  
selected medications included in the medication list and the EMR information  
~~passed through~~ upon employing the drug-drug and the drug-food association  
tables, wherein the match indicates the potential of drug-drug or ~~food-drug-drug-~~  
food reactions occurring upon the ~~associated~~ selected medication being  
administered to the person; and

~~upon determining a match exists~~, outputting a response relating to each  
match.

58. (Previously Presented) The computer storage media of claim 57, wherein receiving a list of possible medications comprises receiving a list of possible medications that may be administered to a specific person scheduled to undergo a specific type of medical procedure, and wherein comparing the medication list comprises comparing the medication list to information in the specific person's EMR.

59. (Previously Presented) The computer storage media of claim 57, wherein receiving a list of possible medications comprises receiving a list of possible medications that may be administered to any person scheduled to undergo a specific type of medical procedure, and further comprising selecting a person to undergo the medical procedure and receive at least one of the medications from the list of medications.

60. (Previously Presented) The computer storage media of claim 57, wherein the method further comprising selecting an atypical clinical event from the group consisting of a drug-drug interaction, drug-food interaction, a drug-allergy interaction, and a drug-gene interaction.

61. (Currently Amended) The computer storage media of claim 57, wherein the medical procedure includes any medical procedure requiring the use of anesthesia.

62. (Previously Presented) The computer storage media of claim 57, wherein the list of possible medications includes medications used in a medical procedure involving anesthesia.

63. (Previously Presented) The computer storage media of claim 57, wherein the list of possible medications includes medications used in a radiologic medical procedure.

64. (Currently Amended) The computer storage media of claim 57, wherein the list of possible medications includes medications used in ~~a oncologic~~ an oncologic medical procedure.

65. (Previously Presented) The computer storage media of claim 57, wherein the information in the person's EMR includes a list selected from one of the groups consisting of medications the person is currently taking or has recently taken, foods the person has consumed, the person's allergies to medications and genetic test information for the person.

66. (Previously Presented) The computer storage media of claim 60, wherein the response includes a listing of the match and the associated atypical clinical event.

67. (Previously Presented) The computer storage media of claim 66, wherein the list of possible medications includes a dosage amount for each medication in the list, and wherein the response further includes an indication of the predicted severity of the atypical clinical event.

68. (Previously Presented) The computer storage media of claim 66, further comprising displaying information about at least one medication of the list of possible medications that is involved in the match upon selection of the medication at the response.

69. (Previously Presented) The computer storage media of claim 57, wherein the list of possible medications is received over a communication network from a remote computing device.

70. (Previously Presented) The computer storage media of claim 57, further comprising:

selecting the person from a list of person's scheduled for a medical procedure; and

retrieving the person's EMR prior to comparing the medication list to information in the person's EMR.

71. (Canceled).

72. (Canceled).

73. (Currently Amended) Computer storage media containing computer-executable instructions that, when executed, perform a method for controlling a computing system for preemptive determination of the potential for atypical clinical event occurrence related to the administering of at least one medication to a person having an electronic medical record (EMR), the method comprising the steps of:

accessing medication-procedure tables that maintain specific sets of medications and dosages thereof that are administered for each of a plurality of medical procedures;

selecting a pre-defined list of possible medications from the medication-procedure tables that are to be administered to the person for a medical procedure scheduled for the person, wherein the medication list includes a specific set of medications and dosages thereof that correspond to the medical procedure;

comparing the medication list ~~to directly against~~ information in extracted from the person's electronic medical record (EMR), wherein the extracted information includes a weight and an age of the person;

determining ~~whether that~~ at least one match exists between any of the

selected medications included in the medication list and the ~~[[()]]EMR[()]~~ information, wherein the match indicates the potential of drug-allergy reactions occurring upon the ~~associated~~-selected medication being administered to the person;

~~comparing the medication list to the information in the person's electronic medical record (EMR) upon being passed through an association table, wherein the association table includes information regarding adverse affects caused by medications interacting with each other and caused by a medication and a food interacting with each other;~~

~~determining whether that at least one match exists between any of the medications included in the list and the EMR information passed through the association table, wherein the match indicates the potential of drug-drug or food-drug reactions occurring upon the associated medication being administered to the person; and~~

~~upon determining a match exists, generating an alert box for each match, wherein the alert box includes an indication of the selected medication from the medication list that is involved in the match and a predicted severity of adverse affects that result from administering the matching selected medication, wherein the predicted severity is based on the dosage of the selected matching medication, and the age and the weight of the person receiving the medical procedure; and~~

~~outputting a response relating to each match to a window on a display device, wherein the response includes presenting the alert box for each match within the window, and wherein the predicted severity for each match is presented~~

as a graphical symbol that represents at least one of mild severity, moderate severity, or severe severity.